



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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8/8/2014

DRAFT AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]:

Wyman- Gordon Company division of
Precision Castparts Corp. (PCC)
PO Box 8001
244 Worcester Street
North Grafton, MA 01536-8001

INFORMATION RELIED UPON:

Application No. CE-12-001

Transmittal No.: X241702
Transmittal No.: W063510 (OP expired 2012)

FACILITY LOCATION:

244 Worcester Street
North Grafton, MA 01536-8001

FACILITY IDENTIFYING NUMBERS:

AQ ID: 118-039
FMF FAC NO.: 130861
FMF RO NO.: 161305

NATURE OF BUSINESS:

Manufacturer of Ferrous and Non Ferrous Alloy
Forgings

Standard Industrial Classification (SIC):

3463, 3462
**North American Industrial Classification
System (NAICS):** 332112, 332111

RESPONSIBLE OFFICIAL:

Name: Authorized Representative
Title: General Manager - Grafton

FACILITY CONTACT PERSON:

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This Operating Permit shall expire on _____

For the Department of Environmental Protection

Permit Chief, Bureau of Waste Prevention

Date

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SPECIAL CONDITIONS FOR OPERATING PERMIT

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

A. DESCRIPTION OF FACILITY AND OPERATIONS

Wyman Gordon Company is located at 244 Worcester Street in North Grafton, Massachusetts ("Facility"). The Facility is a manufacturer of ferrous and nonferrous alloy forgings. Raw materials consist primarily of steel, titanium, and high temperature alloys. Stock is cut to size, forged, machined, and heat-treated. A majority of the products are used for aerospace and land-based turbines and commercial power plants. Table 3 identifies the emissions and the applicable requirements for each emission unit. Tables 4, 4A-4G, 5, and 6 describe monitoring, recordkeeping and reporting requirements that the facility must comply with.

The Permittee is subject to Compliance Assurance Monitoring (CAM) pursuant to 40 CFR 64. The Facility is major for Nitrogen Oxides ("NOx"). The Facility operates nine (9) acid scrubbers to control NOx emissions from the etching process (EU#6). The units have pre-control potential NOx emissions greater than the major source threshold (50 tons per year). In addition, the Facility has several emission units that are equipped with particulate matter ("PM") control equipment. As such, Tables 4 A – 4F describe the operating parameters i.e. opacity, water flow, pH and static pressure, monitored to ensure compliance with emission limits.

The Facility has three (3) emergency diesel-fired engines:

- NTTA-855-F Cummins fire pump installed in 1980 (EU #19) with a maximum rating of 0.445 million Btu per hour of heat input (175 HP).
- NH-220-IF Cummins engine installed 1981 (EU#20) with a maximum rating 1.193 million Btu per hour of heat input (465 HP).
- Detroit Diesel fire pump installed in 1950 (EU #21) with a maximum rating 0.407 million Btu per hour of heat input (160 HP).

All of these engines are subject to the 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). They are considered existing emergency engines because they were installed before June 12, 2006, are rated at less than 500 horsepower ("hp"), and operate at an area source of Hazardous Air Pollutants ("HAPs"). This Operating Permit contains the emission limits, monitoring, record-keeping and reporting requirements as required by 40 CFR 63, Subpart ZZZZ for EUs #19-21.

"National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories" applies to this Facility as it falls into the standard industrial code 3462- Iron and Steel Forging. This Operating Permit contains the management practices and monitoring, record-keeping and reporting requirements as required by 40 CFR 63, Subpart XXXXXX (6X) for Emission Units 5, 7, 10, 13, 18, 22 and 24 to minimize air pollution of Metal Fabrication Hazardous Air Pollutants ("MFHAP"). MFHAP means any compound of the following metals: cadmium, chromium, lead, manganese or nickel, or any of these metals in the elemental form, with the exception of lead.

The following emission units were removed, altered or added since the last Operating Permit was issued:

- Emission Unit #2 - consisted of 26 furnaces including a Salem Brosius furnace. The Salem Brosius furnace was modified in 2007 and is subject to new opacity and particulate matter limits as stated in Transmittal ("Tr") no. W120151. The Salem Brosius furnace has been split out from EU #2 and has become EU# 23.
- Emission unit #3 - consisted of the 6,000 and 18,000 ton presses. The 6,000 ton press was removed in 2012.
- Emission Unit #12 - Stock Cutting was removed in 2012.
- Emission Unit # 16 - Hot flash burning was removed in 2012.
- Emission Units #22 - Welding /caning operation and #24 -Saws have been added because of their applicability to 40 CFR 63 subpart XXXXXX, Metal Fabrication Hazardous Air Pollutants (MFHAP).

2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

Table 1			
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
1	Cleaver Brooks Boilers	2 boilers 14,650,000 Btu/hr each	None
2	Furnaces	25 furnaces with ratings from 10-40,000,000 Btu/hr	None
3	18,000 Ton Press, note: 6000 ton press removed	N/A	ESP 98% control efficiency PM
4	35,000 & 50,000 Ton Presses	N/A	ESP 95% control efficiency PM
5	4 Billet Grinders (Midwest Grinders)	N/A	two (2) Baghouses
6	Chemical Etching and Milling	N/A	9 Scrubbers 96% control efficiency acid gases, caustic mists and 30% NOx control, 99% removal of liquid particulate
7	Grit Blasting and Cleaning (Pangborn 5926)	N/A	Baghouse
8	17' Rotary Hearth Furnace	17,760,000 Btu/hr	none

Table 1			
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
9	30' Rotary Hearth Furnace	31,500,000 Btu/hr	none
10	Swing frame grinders	N/A	Baghouse preceded by (4) cyclones
11	Parts cleaners	varies	none
13	6066 Wheelabrator Abrasive Blaster	NA	cartridge PM collector
14	30' rotary furnace	31,500,000 Btu/hr	None
15	Gasoline storage tank	4000 gallons	Stage I vapor recovery
17	Hot Flash Burning	NA	Micropul Baghouse
18	4885 Wheelabrator Abrasive blaster	NA	Baghouse
19	NTTA-855-F Cummins fire pump (West)	175 hp (445,672 Btu/hr)	none
20	NH-220-IF Cummins engine (Office)	465 hp (1,184,215 Btu/hr)	none
21	Detroit Diesel Fire Pump (East)	160 hp (407,471 Btu/hr)	none
22	Welding Canning Operation	NA	none
23	Salem-Brosius furnace WG# 2998	NA	none
24	Saws	NA	none

Table 1 Key:

EU# = Emission Unit Number
Btu/hr = British thermal units per hour
NA = not applicable
PM = Particulate Matter (total)

MFHAP = metal fabrication hazardous air pollutants
Hp = horse power
PCD = pollution control device
% = percent
` = feet

3. IDENTIFICATION OF EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C (5) (h):

Table 2	
Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant	310 CMR 7.00:Appendix C(5)(h)

to 310 CMR 7.12.	
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Table 2 Key:
CMR = code of Massachusetts regulations

4. APPLICABLE REQUIREMENTS

A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Tables 3 and 3A below:

Table 3					
EU #	Fuel/Raw Material/	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No
1	Natural Gas	Smoke	NA	Not to exceed No.1 ¹	310 CMR 7.06(1)(a)
		Opacity		Not to exceed 20% ²	310 CMR 7.06(1)(b)
		PM		0.10 lbs/MMBtu	310 CMR 7.02(8) Table 6
2	Natural gas	Opacity	NA	Not to exceed 20% ²	310 CMR 7.06(1)(b)
		PM		0.12 lbs/MMBtu/hr	310 CMR 7.02(8) Table 4
3	Metal	PM	NA	98%+ controlled by ESP	CM-75-IF-020 CM-84-IF-037
		Smoke		Not to exceed No.1 ¹	310 CMR 7.06(1)(a)
		Opacity		Not to exceed 20% ²	310 CMR 7.06(1)(b)
4	Metal	PM	NA	95% controlled by ESP	CM-77-IF-008
		Smoke		Not to exceed No.1 ¹	310 CMR 7.06(1)(a)
		Opacity		Not to exceed 20% ²	310 CMR 7.06(1)(b)
5	Metal Billets	PM	Differential pressure drop 0-10 in. water (w.c.)	0.008 gr/ACF, 1.4 lb/hr & 6.13 ton/yr ⁴ each baghouse with 97% efficiency	C-P-90-064, TR#115595 40 CFR 63.11516(c), see Table 8 of TR#X241702 for management practices
		Opacity	NA	Less than 5%	
6	Metal forgings	Acids & caustic mists /fumes	Scrubber liquor is treated and neutralized for recirculation.	96% control	CM-76-IF-025 CM-78-IF-008 TR# W122581(minor mod)
		PM	Maintain the scrubbing water pH between 6-9 & static pressure across the plenum at 1.25-5 in water (w.c.)	99% removal efficiency	
		NOx		30% removal efficiency 24.6 tons/yr ⁴ , 4.6 tons/mo	TR #W003949
		Opacity		Not to exceed 20% ²	310 CMR 7.06(1)(b)
7	Metal	PM	Pressure differential of 2"-10" across baghouse	99% + removal efficiency 0.2lb/hr; 9 ton/yr ⁴	C-P-88-058, TR#W006130 TR# W122581
		Opacity		Not to exceed 10%	

Table 3					
EU #	Fuel/Raw Material/	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No
					(minor mod) 40 CFR 63.11516(a), Table 8 of TR#X241702 management practices
8	Natural gas	Opacity		0%	TR#126883
		Smoke		Not to exceed No. 1 ¹	310 CMR 7.06(1)(a)
		PM		0.10 lbs/MMBtu	310 CMR 7.02(8) Table 6
9	Natural gas	Opacity		0%	TR#W003112
		Smoke		Not to exceed No. 1 ¹	310 CMR 7.06(1)(a)
		PM		0.10 lbs/MMBtu	310 CMR 7.02(8) Table 6
10	Metal forgings	PM	NA	> 95% removal efficiency	CM-75-IF-014 40 CFR 63.11516(c), Table 8 of TR#X241702 management practices
		Opacity		0%	
11	Solvents	VOC	<ul style="list-style-type: none"> • <100 gpm for each degreaser, • solvents used shall have a vapor pressure of ≤ 1.00 mm Hg at 20 deg. C 		310 CMR 7.03(8), 310 CMR 7.18(8)- work practices
13	Metal shot	PM	Differential pressure drop 2-10 inches of water (w.c.)	4283.6 lbs/yr 99.5% control efficiency	TR#W003337 / TR#W122581 TR#X234325(admin amendment-July 28, 2010) 40 CFR 63.11516(a), see Table 8 of TR#X241702 for management practices
		Opacity	NA	Not to exceed 10%	
14	Natural gas	Opacity	NA	0%	TR#W003111
		Smoke		Not to exceed No. 1 ¹	310 CMR 7.06(1)(a)
		PM		0.10 lbs/MMBtu	310 CMR 7.02(8)

Table 3					
EU #	Fuel/Raw Material/	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No
					Table 6
15	Gasoline	VOC	NA	Submerged fill	310 CMR 7.24(3)(a)
				Stage I Vapor Recovery	310 CMR 7.24(3)(b)
17	Metal	PM	Differential pressure range shall be between 2-10 in of water (w.c.)	3314.8 lbs/yr 99% control efficiency	TR#W008396 ³ TR#W122581
		Opacity	NA	Not to exceed 10%	
18	Metal	Opacity	NA	Not to exceed 20% ²	310 CMR 7.06(1)(b) 40 CFR 63.11516(a), Table 8 of TR#X241702 management practices
		PM	Differential pressure range between 2-10 inches of water(w.c.)	98% control efficiency	
22	Welding rod and wire	MFHAP	Less than 2000 pounds of welding rod and wire per 12 month rolling period ⁴	NA	TR #241702 40 CFR 63.11516(f),Table 8 of TR#X241702 management practices
23	Natural gas	Opacity		Not to exceed 5%	TR # W120151
		PM		0.10 lbs /MMBtu	TR # W120151 310 CMR 7.02(8) Table 6
24	Metal forgings			Minimize excess dust in the surrounding area Operate machining equipment according to the manufacturer's instructions.	40 CFR 63.11516(b), Table 8 of TR#X241702 management practices
Facility Wide		Greenhouse gas ⁵		NA	310 CMR 7.71 (state only)

Table 3 Key

C = centigrade
CFR = Code of federal regulations
CH₄ = methane
CMR = Code of Massachusetts Regulations

Mo = month
mod = modification
N₂O = nitrous oxide
RICE = Reciprocating Internal Combustion Engine

CO₂ = carbon dioxide
EU# = Emission Unit Number
Gpm = gallons per month
gr/ACF = grains per actual cubic foot
Hg = mercury
lbs/MMBtu = pounds per Million British thermal units
in = inches
Mm = millimeter

Tons/ yr = tons per year
"w.c. = inch water column
% = percent
@ = at
SF₆ = Sulfur hexafluoride
PM = Particulate Matter (total)

Table 3 Notes

- 1) Not to exceed No. 1 of the Chart for a period or aggregate period of time in excess of 6 minutes during any one hour provided that at no time during the said six minutes shall the shade, density or appearance be equal to or greater than No. 2 of the Chart.
- 2) Not to exceed 20% opacity for a period or aggregate period of time in excess of 2 minutes during any one hour provided that, at no time during the said two minutes shall the opacity exceed 40%.
- 3) The Torit cartridge system was replaced with a Micropul baghouse in 2006.
- 4) To calculate the amount of a consecutive 12 month rolling period take the current calendar month amount and add it to the previous 11 calendar months total amount
- 5) Greenhouse Gas means any chemical or physical substance that is emitted into the air and that the department may reasonably anticipate will cause or contribute to climate change including, but not limited to, CO₂, CH₄, N₂O, SF₆, hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

Table 3A Emergency Engines		
EU #	Restrictions	Applicable Regulation
19-21	1) After May 3, 2013 the Permittee must operate the emergency stationary RICE according to the requirements in paragraphs 1) through 4) of this section. In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 1) through 4) of this section, is prohibited. If the Permittee does not operate the engine according to the requirements in paragraphs 1) through 4) of this section, the engine will not be considered an emergency engine under 40 CFR Subpart ZZZZ and must meet all requirements for non-emergency engines	40 CFR 63.6640(f)
	2) After May 3, 2013, there is no time limit on the use of emergency stationary RICE in emergency situations.	40 CFR 63.6640(f)(1)
	3) After May 2, 2013, the Permittee may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs (i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs 3) and 4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph 3).	40CFR 63.6640(f)(2)
	(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent	

Table 3A Emergency Engines		
EU #	Restrictions	Applicable Regulation
	<p>balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.</p> <p>(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.</p> <p>(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.</p>	
19-21	<p>4) If the Permittee operates a new, reconstructed, or existing stationary engine after May 3, 2013, the Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to 40 CFR 63 Subpart ZZZZ applies.</p>	40 CFR 63.6625 (h)
	<p>5) After May 3, 2013, emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph 2) of this section. Except as provided in paragraphs (i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.</p> <p>(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.</p> <p>(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:</p>	40 CFR 63.6640(f)(4)

Table 3A Emergency Engines		
EU #	Restrictions	Applicable Regulation
	<p>(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.</p> <p>(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.</p> <p>(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.</p> <p>(D) The power is provided only to the facility itself or to support the local transmission and distribution system.</p> <p>(E) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of Permittee.</p>	

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 4A-4F, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Tables 3 and 3A.

Table 4	
EU	Monitoring And Testing Requirements
1,2,8,9,14	1. In accordance with 310 CMR 7.04(4)(a), the Permittee shall inspect and maintain the emission units in accordance with the manufacturer's recommendations and test for efficient operation at least once each calendar year
3 and 4	2. In accordance with TR#W063510, the Permittee shall observe the conductivity indicator lights at each ESP station once per day to verify that 75% of the lights are operating and indicating that a current is passing through the cell. In accordance with TR#W063510, the Permittee shall record daily the percentage of lights operating.
	3. In accordance with TR#W063510 and 310 CMR 7.02(3)(n), the Permittee shall continuously operate each ESP and the associated cell cleaning apparatus in proper operating condition. The Permittee shall maintain records of design specifications and standard operating and maintenance procedures (SOMPs) for the ESPs and the associated cell cleaning equipment on site at all times.
	4. In accordance with TR#W063510, the Permittee shall monitor the voltage at the ionizer and cell on a quarterly basis to verify that voltage is at least 10,000 volts at the ionizer and 6,500 volts at the cell.
	5. In accordance with TR#W063510, the Permittee shall monitor daily the stack serving the ESPs for visible emissions

Table 4	
EU	Monitoring And Testing Requirements
	utilizing EPA Method 9. The Permittee shall document the inspection and the opacity of the stack serving the ESPs.
5	6. In accordance with the TR#W063510 and 310 CMR 7.02(3)(n), the Permittee shall monitor and maintain the baghouse serving the billet grinders in proper operating condition.
	7. In accordance with 310 CMR 7.00 Appendix C (9) (c), the Permittee shall monitor and maintain the differential pressure gauge or the fine particle flow/emission monitor and alarm on the baghouse. According to the standard operating procedures (amended May 5, 2006), the baghouse operates at a pressure differential between 0-10 inches water (w.c.). The monitor shall comply with 40 CFR 60, Appendix F (Quality Control Procedures).
	8. In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall conduct preventative maintenance activities. Preventive maintenance shall include (but is not limited to) a daily visual inspection of the baghouse outlet for opacity and of the differential pressure gauge, a weekly inspection of blowers, cleaning cycle, air dryer system cycling, pressure gauge settings, collection system, a semiannual PM includes the weekly PM items, plus visible observations for visible dust on the clean side, solenoid valves, and preparation for seasonal changes. The Permittee shall maintain on site records that confirm the date of inspection and itemize the operating parameters examined with the initials of the operator that conducted the inspection.
	9. In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall maintain records of baghouse design specifications and required operation and preventative maintenance procedures.
6	10. In accordance with TR#W063510 and 310 CMR 7.02(3)(n), the Permittee shall monitor each of the nine (9) scrubbers to ensure they are operating continuously while etching is occurring.
	11. In accordance with TR#W003949, the Permittee shall continually monitor and record the pH of the recirculated scrubbing water and maintain the pH of the recirculated water between 6-9.
	12. In accordance with TR#W003949, the Permittee shall calibrate the pH probes quarterly and check daily that the pH probes are clean and monitoring the recirculated water.
	13. In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall inspect the scrubber media, water flow to the scrubber and the automatic pH adjusting system on a daily basis to assure proper operation of the scrubbers and the associated automatic pH adjusting system.
	14. In accordance with TR#W003949, the Permittee shall maintain records on site that includes at a minimum, design specifications, operation, maintenance and inspection procedures for the automatic pH adjustment system and scrubber. The records shall include the date the inspection and/or maintenance or repairs were conducted, what actions were taken, date the actions are taken, including when the pH probes are calibrated and cleaned, and when scrubber media was replaced.
	15. In accordance with TR# 86002, the Permittee shall maintain daily records of scrubber use and hours of operation for each scrubber.

Table 4

EU	Monitoring And Testing Requirements
	16. In accordance with TR#W003949 and TR # W12258, the Permittee shall observe and record the static pressure at the plenum serving the scrubber at least once every shift to assure that the static pressure gauge is maintained between 1 ¼ inches and 5 inches of water.
6	17. In accordance with TR# TR#W063510, the Permittee shall monitor daily the stack serving the scrubbers for visible emissions utilizing EPA Method 9.
7	18. In accordance with TR#W006130 and 310 CMR 7.02(3)(n), the Permittee shall monitor the baghouse daily to maintain the baghouse in proper operating condition.
	19. In accordance with 310 CMR 7.00: Appendix C (9)(c) and TR#W122581, the Permittee shall continually monitor the pressure drop across the baghouse and the maintain the pressure differential between 2-10 inches of water (w.c.). The Permittee shall ensure that the monitor is installed in compliance with 40 CFR 60, Appendix F (Quality Control Procedures).
	20. In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall perform preventative maintenance activities including an inspection of the baghouse on a monthly basis and collection container on a weekly basis. The Permittee shall maintain records of design specifications and required operation and maintenance procedures to assure proper operation of the baghouse. Records shall confirm the date of inspection and itemize the operating parameters examined
10	21. In accordance with 310 CMR 7.02(3)(n), the Permittee shall monitor the baghouses and cyclones, daily and maintain them in proper operating condition.
	22. In accordance with 310 CMR 7.00: Appendix C (9)(c), the Permittee shall continually monitor the static pressure at the cyclones and baghouses and maintain the static pressure gauge according to manufacturer's specifications. In accordance with CM-75-IF-014, the Permittee shall ensure that the cyclones operate at 3 inch water static pressure. The baghouse shall operate at a static pressure differential between 2 - 10 inches of water.
	23. In accordance with 310 CMR 7.00: Appendix C (9)(b) and 40 CFR 70.6 (a)(3), the Permittee shall perform preventative maintenance activities that include an inspection of the baghouse and cyclone on a monthly basis and baghouse collection container on a weekly basis. The Permittee shall maintain records of design specifications and required operation and maintenance procedures to assure proper operation of the baghouse and cyclone. Records shall confirm the date of inspection and itemize the operating parameters examined
13	24. In accordance with 310 CMR 7.02(3)(n), the Permittee shall monitor the particulate control equipment and maintain it in proper operating condition.
	25. In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall perform preventative maintenance activities that include an inspection of the control equipment on a monthly basis and particulate collection container on a weekly basis. The Permittee shall maintain records of design specifications and required operation and maintenance procedures to assure proper operation of the cartridge filters. Records shall confirm the date of inspection and itemize the operating parameters examined.

Table 4	
EU	Monitoring And Testing Requirements
	26. In accordance with the standard operating procedure for the cartridge collector serving the Wheelabrator, the Permittee shall monitor the operation of the unit to maintain a pressure differential between 2-10 inches of water.
17	27. In accordance with TR#W008396 and 310 CMR 7.02(3)(n), the Permittee shall maintain the particulate control equipment in proper operating condition.
	28. In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall perform preventative maintenance activities that include an inspection of the control equipment on a weekly basis and particulate collection container on a daily basis. The Permittee shall maintain records of design specifications and required operation and maintenance procedures to assure proper operation of the baghouse. Records shall confirm the date of inspection and itemize the operating parameters examined.
	29. In accordance with TR#W122581, the Permittee shall maintain the differential pressure gauge between 2-10 inches water (w.c.) across the baghouse.
	30. In accordance with TR#W008396, the Permittee shall manually record the differential pressure across the baghouse at least once per day.
18	31. In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall perform preventative maintenance activities that include an inspection of the control equipment on a weekly basis and particulate collection container on a daily basis. The Permittee shall maintain records of design specifications and required operation and maintenance procedures to assure proper operation of the baghouse. Records shall confirm the date of inspection and itemize the operating parameters examined.
	32. In accordance with the standard operating procedure, the Permittee shall monitor the baghouse serving the Wheelabrator 4885 to ensure that it operates at a pressure differential between 2-10 inches of water.
19-21	33. Pursuant to 40 CFR 63.6625 (f) and after May 3, 2013, the Permittee shall install and operate a non-resettable hour meter if one is not already installed.
	34. Pursuant to 40 CFR 63.6625(i) and after May 3, 2013, if the Permittee owns or operates a stationary CI engine that is subject to the work, operation or management practices in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, the Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

Table 4

EU	Monitoring And Testing Requirements
<p>22</p> <p>22</p>	<p>35. In accordance with 40 CFR 63.11517(b) and to ensure compliance with the management practices, the Permittee shall perform visual determination of fugitive emissions as specified in 40 CFR 63.11517(b),</p> <ul style="list-style-type: none"> a) The visual determination of fugitive emission shall be performed at the primary vent, stack, exit or opening from the building containing the welding operation. b) <u>Daily Method 22 Testing.</u> The visual determination of fugitive emissions must be performed daily and in accordance with the procedures of EPA Method 22, of 40 CFR 60, Appendix A-7. The determination must be performed while the source is operating under normal conditions. The duration of each EPA Method 22 test must be at least 15 minutes, and visible emissions will be considered to be present if they are detected for more than six minutes of the fifteen minute period. c) <u>Weekly Method 22 Testing.</u> If no visible fugitive emissions are detected in consecutive daily EPA Method 22 tests, performed in accordance with 40 CFR 60, Appendix A-7 paragraph (b) (1) of this section for 10 days of work day operation of the process, the Permittee may decrease the frequency of EPA Method 22 testing to once every five days of operation of the process (one calendar week). If visible fugitive emissions are detected during these tests, the Permittee must resume EPA Method 22 testing of that operation once per day during each day that the process is in operation. d) <u>Monthly Method 22 Testing.</u> If no visible fugitive emissions are detected in four consecutive weekly EPA Method 22 tests performed in accordance with paragraph (b)(2) of this section, you may decrease the frequency of EPA Method 22 testing to once per 21 days of operation of the process (one calendar month). If visible fugitive emissions are detected during these tests, you must resume weekly EPA Method 22. e) <u>Quarterly Method 22 Testing.</u> If no visible fugitive emissions are detected in three consecutive monthly EPA Method 22 tests performed in accordance with paragraph (b)(3) of this section, the Permittee may decrease the frequency of EPA Method 22 testing to once per 60 days of operation of the process (3 calendar months). If visible fugitive emissions are detected during these tests, you must resume monthly EPA Method 22. f) <u>Visual determination of emissions opacity for welding Tier 2 or 3, general.</u> Visual determination of emissions opacity must be performed in accordance with the procedures of EPA Method 9, of 40 CFR part 60, Appendix A-4, and while the affected source is operating under normal conditions. The duration of the EPA Method 9 test shall be thirty minutes. g) <u>Visual determination of emissions opacity for welding Tier 2 or 3, graduated schedule.</u> The Permittee shall perform visual determination of emissions opacity in accordance with paragraph (c) of this section and according to the schedule in paragraphs (d) (1) through (5) of this section. Daily Method 9 testing for welding, Tier 2 or 3. Perform visual determination of emissions opacity once per day during each day that the process is in operation. h) <u>Weekly Method 9 testing for welding, Tier 2 or 3.</u> If the average of the six minute opacities recorded during any of the daily consecutive EPA Method 9 tests performed in accordance with paragraph (d) (1) of this section does not exceed 20 percent for 10 days of operation of the process, you may decrease the frequency of EPA Method 9 testing to once per five days of consecutive work day operation. If opacity greater than 20 percent is detected during any of these tests, you must resume testing every day of operation of the process according to the requirements of paragraph (d) (1) of this section. i) <u>Monthly Method 9 testing for welding Tier 2 or 3.</u> If the average of the six minute opacities recorded during any of the consecutive weekly EPA Method 9 tests performed in accordance with

Table 4

EU	Monitoring And Testing Requirements
22	<p>paragraph (d)(2) of this section does not exceed 20 percent for four consecutive weekly tests, you may decrease the frequency of EPA Method 9 testing to once per every 21 days of operation of the process. If visible emissions opacity greater than 20 percent is detected during any monthly test, you must resume testing every five days of operation of the process according to the requirements of paragraph (d)(2) of this section.</p> <p>j) <u>Quarterly Method 9 testing for welding Tier 2 or 3.</u> If the average of the six minute opacities recorded during any of the consecutive weekly EPA Method 9 tests performed in accordance with paragraph (d)(3) of this section does not exceed 20 percent for three consecutive monthly tests, the Permittee may decrease the frequency of EPA Method 9 testing to once per every 120 days of operation of the process. If visible emissions opacity greater than 20 percent is detected during any quarterly test, you must resume testing every 21 days (month) of operation of the process.</p> <p>k) <u>Return to Method 22 testing for welding, Tier 2 or 3.</u> If, after two consecutive months of testing, the average of the six minute opacities recorded during any of the monthly EPA Method 9 tests performed in accordance with paragraph (d)(3) of this section does not exceed 20 percent, you may resume EPA Method 22 testing as in paragraphs (b)(3) and (4) of this section. In lieu of this, the Permittee may elect to continue performing EPA Method 9 tests.</p>
Facility-wide	<p>36. In accordance with 310 CMR 7.13(1), the Permittee shall conduct emission testing to demonstrate compliance with the Emission Limits specified in Table 3 and when the Department has determined that such stack testing is necessary to determine compliance with the Department's regulations or design provisos. Testing shall be in accordance with EPA approved reference test methods unless otherwise approved by EPA and the Department or unless otherwise specified and shall include test Methods 1 through 4 and for Particulate Matter (Method 5), Sulfur Dioxide (Method 6C), Nitrogen Oxides (Method 7E), Carbon Monoxide (Method 10), Gaseous Organic Compounds (Method 18), Total Gaseous Organic Concentration (Method 25A), Hydrogen Chloride (Method 26A), Metals (Method 29). Such stack testing shall be conducted:</p> <p>a) by a person knowledgeable in stack testing,</p> <p>b) in accordance with procedures contained in a test protocol which has been approved by the Department, and</p> <p>c) in the presence of a representative of the Department when deemed necessary.</p> <p>37. Compliance with the allowable smoke and opacity limits shall be determined in accordance with EPA Method 9, as specified in 40 CFR 60, Appendix A in accordance with 310 CMR 7:00 Appendix C (9)(b).</p>
Facility wide	<p>38. The Permittee shall monitor the operations of the entire facility such that necessary information is available for the preparation of the annual Emission Statement Forms as required by 310 CMR 7.12.</p> <p>39. In accordance with 310 CMR 7.71(1) and Appendix C(9), the Permittee shall establish and maintain data systems or record keeping practices (e.g. fuel use records, SF6 usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c. 298, § 6. (State only requirement).</p>

Table 4 Key

CI = compression ignition
CFR = code of federal regulation
CMR = code of Massachusetts regulations
EU = emission unit number
ESP = electrostatic precipitator
MFHAP = Metal Fabrication Hazardous Air Pollutants
O/M = operation /maintenance

PM = particulate matter (total)
SF6 = sulfur hexafluoride
TR = transmittal
w.c.= water column
> = greater than
% = percent

TABLE 4A Compliance Assurance Monitoring (CAM) – 40 CFR 64 Emission Unit # 6 Scrubber Control for Nitrogen Oxides & Particulate						
Indicator	Differential pressure	Opacity	Liquid Flow Meter	Static Pressure Across the Plenum	pH of Scrubbing Water	Inspection /Maintenance
Measurement Approach	The pressure of each scrubber is continuously monitored with a differential pressure transmitter (magnehelic). The results are displayed on the device control panel. Differential pressure readings are an indicator of when the scrubber media needs replacement.	Daily visible emissions observation by certified employees using EPA Method 9.	Make-up water flow rate to each scrubber is monitored by a rotometer and a nozzle pressure sensing gauge.	The pressure of each scrubber is continuously monitored with a static pressure gauge (manometer). The results are displayed on the device control panel.	The pH of the recirculated scrubbing water is monitored with pH probes. Results are continuously displayed on the device control panel.	Visual inspections and maintenance shall be performed according to the O/M checklist that shall include inspection of the scrubber inlet and outlet for water flow. Daily inspections shall include but not be limited to scrubber media, caustic line strainers, blowers, scrubber sumps, water flow, and the automatic pH adjusting system. Maintenance is performed as needed.
Indicator Range	The indicator range is a differential pressure reading between 2 and 10 inches of water column. An excursion triggers an alarm, inspection, corrective action and reporting requirement	The indicator is $\leq 20\%$ opacity. Excursion of $> 20\%$ triggers an inspection, corrective action and reporting requirements	The make-up water flow rate range is 5-25 gpm. The nozzle water pressure is a minimum of 9 psig. An excursion triggers an inspection, corrective action and reporting	The indicator range is a static pressure reading between 1.25 and 5 inches of water column. An excursion triggers an inspection, corrective action and reporting requirements	The indicator range is between pH 6 and 9. An excursion triggers an inspection, corrective action and reporting requirements.	Failure to perform an inspection triggers a reporting requirement. Equipment failures identified during the inspection trigger corrective action.

TABLE 4A Compliance Assurance Monitoring (CAM) – 40 CFR 64 Emission Unit # 6 Scrubber Control for Nitrogen Oxides & Particulate						
Indicator	Differential pressure	Opacity	Liquid Flow Meter	Static Pressure Across the Plenum	pH of Scrubbing Water	Inspection /Maintenance
Performance Criteria	The alarm sounds when the measurements are outside of the indicator range.	Qualified personnel that maintain EPA Method 9 visible emissions certification shall perform inspections.	requirements The alarm is triggered when the pressure sensor indicates pressure below minimum of 9 psig. The makeup water flow is monitored by the first shift treatment plant operator and recorded once during the first shift in a logbook located near the equipment.	The alarm sounds when the measurements are outside of the indicator range.	An alarm sounds when the measurements are outside of the indicator range -The probes are calibrated quarterly -pH is continuously monitored and logged -pH probes are cleaned weekly.	Inspections shall be performed by qualified personnel. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and or maintenance was conducted, what actions were taken, when scrubber media is replaced, when probes are calibrated and cleaned. The make-up and caustic line strainers shall be cleaned weekly.

Table 4A Key:

≤ = less than or equal

% = percent

gpm = gallons per minute

> = greater than

EPA = Environmental Protection Agency

O/M = operation /maintenance

psig = pounds per square inch gauge

TABLE 4B Compliance Assurance Monitoring (CAM) – 40 CFR 64 Emission Units # 3 and 4 Particulate Matter (PM) control at the ESP				
Indicator	Voltage, Current	Opacity	Conductivity	Inspection /Maintenance
Measurement Approach	Current & voltage are monitored once per quarter using a voltmeter taking readings at the ionizer and the cell.	Daily visible emissions observation by certified employees using EPA Method 9	An indicator light is located at each of the units. Conductivity indicator light on demonstrates that there is current. When the light is off there is no current passing through the unit. A qualified employee monitors daily.	Daily Visual inspections and maintenance shall be performed according to the O/M checklist. Maintenance is performed as needed.
Indicator Range	The indicator range is above or below 11,000 volts at the ionizer and above or below 6,500 volts at the cell. Excursion triggers an inspection, corrective action and reporting requirements.	The indicator is \leq 20% opacity. Excursion of > 20% triggers an inspection, corrective action and reporting requirements	The indicator is less than 75 % of the lights on. An excursion triggers an inspection, corrective action and reporting requirements.	Failure to perform an inspection triggers a reporting requirement. Equipment failures identified during the inspection trigger corrective action.
Performance Criteria	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel that maintain EPA Method 9 visible emissions certification shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed to manufacturer's recommendations. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and or maintenance was conducted and what actions were taken.

Table 4B Key:

\leq = less than or equal

% = percent

ESP = electrostatic precipitator

O/M = operation /maintenance

> = greater than

EPA = Environmental Protection Agency

PM = particulate matter (total)

TABLE 4C Compliance Assurance Monitoring (CAM) – 40 CFR 64 Emission Unit # 5 Particulate Matter (PM) Control at the Baghouse for Billet Grinders # 5950 & 5951			
Indicator	Differential Pressure	Opacity	Inspection /Maintenance
Measurement Approach	The pressure is monitored with a differential pressure gauge at the inlet and the outlet of the baghouse. Daily during each shift the value is monitored and recorded.	Daily visible emissions observation by certified employees using EPA Method 9.	Daily Visual inspections and maintenance shall be performed according to the O/M checklist. Maintenance is performed as needed.
Indicator Range	The indicator range is 0-10 inches of water (W.C.) Excursion triggers an inspection, corrective action and reporting requirements	The indicator is \leq 5% opacity. Excursion of is $>$ 5% opacity triggers an inspection, corrective action and reporting requirements	Failure to perform an inspection triggers a reporting requirement. Equipment failures identified during the inspection trigger corrective action.
Performance Criteria	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel that maintain EPA Method 9 visible emissions certification shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and or maintenance was conducted and what actions were taken.

Table 4C Key:

\leq = less than or equal

% = percent

O/M = operation /maintenance

w.c.= water column

$>$ = greater than

CAM = continuous compliance monitoring

EPA = Environmental Protection Agency

PM = particulate matter (total)

TABLE 4D Compliance Assurance Monitoring (CAM) – 40 CFR 64 Emission Unit # 17 Particulate Matter (PM) control at the Baghouse for PAC- Hot Flash Burning			
Indicator	Differential Pressure Across Baghouse	Opacity	Inspection /Maintenance
Measurement Approach	The pressure is monitored with a differential pressure gauge at the inlet and the outlet of the baghouse. Daily during each shift the value is monitored and recorded.	Daily visible emissions observation by certified employees using EPA Method 9.	Daily Visual inspections and maintenance shall be performed according to the O/M checklist. Maintenance is performed as needed.
Indicator Range	The indicator range is 2-10 inches of water (W.C.). Excursion triggers an inspection, corrective action and reporting requirements	The indicator is \leq 10 % Opacity. Excursion of $>$ 10% opacity triggers an inspection, corrective action and reporting requirements	Failure to perform an inspection triggers a reporting requirement. Equipment failures identified during the inspection trigger corrective action.
Performance Criteria	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel that maintain EPA Method 9 visible emissions certification shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a Logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and or maintenance was conducted and what actions were taken.

Table 4D Key:

\leq = less than or equal

% = percent

O/M = operation /maintenance

w.c.= water column

$>$ = greater than

EPA = Environmental Protection Agency

PM = particulate matter (total)

TABLE 4E Compliance Assurance Monitoring (CAM) – 40 CFR 64 Emission Unit # 13 (part of) Particulate Matter (PM) Cartridge Collector Control at the Wheelabrator			
Indicator	Indicator#1: Differential Pressure Across Baghouse	Indicator#2: Opacity	Inspection /Maintenance
Measurement Approach	The pressure is monitored with a differential pressure gauge at the inlet and the outlet of the baghouse. Daily during each shift the value is monitored and recorded.	Daily visible emissions observation by certified employees using EPA Method 9.	Daily Visual inspections and maintenance shall be performed according to the O/M checklist. Maintenance is performed as needed.
Indicator Range	The indicator range is 2-10 inches of water (W.C.) Excursion triggers an inspection, corrective action and reporting requirements	The indicator is \leq 10 % opacity. Excursion of $>$ 10% opacity triggers and inspection, corrective action and reporting requirements.	Failure to perform an inspection triggers a reporting requirement. Equipment failures identified during the inspection trigger corrective action.
Performance Criteria	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel that maintain EPA Method 9 visible emissions certification shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and or maintenance were conducted and what actions were taken.

Table 4E Key:

\leq = less than or equal

% = percent

O/M = operation /maintenance

w.c.= water column

$>$ = greater than

EPA = Environmental Protection Agency

PM = particulate matter (total)

TABLE 4F
Compliance Assurance Monitoring (CAM) – 40 CFR 64
Emission Unit # 18 Particulate Matter (PM)
Control at the Wheelabrator 4885

Indicator	Indicator#1: Differential Pressure Across Filter	Indicator#2: Opacity	Inspection /Maintenance
Measurement Approach	The pressure is monitored with a differential pressure gauge at the inlet and the outlet of the baghouse. Daily during each shift the value is monitored and recorded.	Daily visible emissions observation by certified employees using EPA Method 9.	Daily Visual inspections and maintenance shall be performed according to the O/M checklist. Maintenance is performed as needed.
Indicator Range	The indicator range is 2-10 inches of water (W.C.) Excursion triggers an inspection, corrective action and reporting requirements	The indicator is \leq 20 % opacity. Excursion of $>$ 20% opacity triggers an inspection, corrective action and reporting requirements.	Failure to perform an inspection triggers a reporting requirement. Equipment failures identified during the inspection trigger corrective action.
Performance Criteria	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel that maintain EPA Method 9 visible emissions certification shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and /or maintenance was conducted, what actions were taken.	Qualified personnel shall perform inspections. Inspections and maintenance shall be performed according to O/M checklist. Maintenance performed as needed. Results shall be recorded in a logbook. Records shall include at a minimum the date the inspection and or maintenance were conducted and what actions were taken.

Table 4F Key:

\leq = less than or equal

% = percent

O/M = operation /maintenance

w.c.= water column

$>$ = greater than

EPA = Environmental Protection Agency

PM = particulate matter (total)

Table 5

EU#	Record Keeping Requirements
1, 2, 8, 9, 14	1) In accordance with 310 CMR 7.04(4), the Permittee shall record the results of the inspection, maintenance and testing and the date upon which it was performed on the fossil fuel burning equipment and post on or near the equipment.
3, 4, 6	2) In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall maintain a record of required operating and maintenance procedures to assure the proper operation of the control equipment (ESPs and scrubbers). The Permittee shall maintain a record of all malfunctions including at a minimum the date and time the malfunction occurred, a description of the malfunction and the corrective actions taken, the date the corrective actions were initiated and completed and when the facility returned to compliance.
8, 9, 14	3) In accordance with TR#126883, TR#W003111 and TR# W003112 the Permittee shall maintain fuel usage logs, a record of routine maintenance activities, including, at a minimum, the type or description of the maintenance performed and the date and time the work was completed, and a record of all malfunctions including at a minimum the date and time the malfunction occurred, a description of the malfunction and the corrective action taken, the date and time the corrective actions were initiated, and the date and time corrective action was completed and the facility returned to compliance.
11	4) In accordance with 310 CMR 7.18(8)(g) and 7.03(6), the Permittee shall maintain records sufficient to demonstrate compliance. Said records shall include at a minimum, the following; a) identity, quantity, formulation and density of the solvent used; b) quantity, formulation and density of all waste solvent generated and; c) actual operational and any appurtenant emissions capture and control equipment.
15	5) In accordance with 310 CMR 7.24(3)(f), the Permittee shall maintain records of the following: a) all maintenance performed, including the type of maintenance performed and the date it was performed; b) all malfunctions, including the type of malfunction, the date the malfunction was observed and repaired; c) maintain records of the daily throughput of any organic material with a true vapor pressure of 1.5 psia or greater under actual storage conditions.
17 and 18	6) In accordance with 310 CMR 7.00: Appendix C (9)(b), the Permittee shall maintain a record of required operating and maintenance procedures to assure the proper operation of the baghouse. The Permittee shall maintain a record of all malfunctions including at a minimum the date and time the malfunction occurred, a description of the malfunction and the corrective actions taken, the date the corrective actions were initiated and completed and when the facility returned to compliance.
	7) In accordance with W063510, the Permittee shall maintain emission calculations and records sufficient to verify that yearly PM emissions have not exceeded emission limits identified in Table 3 shall be maintained on site.
5,7,10,13,18, 22, 24	8) In accordance with 40 CFR 63.11519(c)(1)-(c)(4), the Permittee shall collect and keep records of the data and information specified in paragraphs (c)(1) through (13) of this section, according to the requirements in paragraph (c)(14) of this section. (c)(1) <u>General compliance and applicability records</u> - Maintain information specified in paragraphs (c)(1)(i) through (ii) of this section for each affected source. (i) Each notification and report that the Permittee submitted to comply with this subpart, and the documentation supporting each notification and report. (ii) Records of the applicability determinations as in §63.11514(b)(1) through (5), listing equipment included in its affected source, as well as any changes to that and on what date

Table 5

EU#	Record Keeping Requirements
5,7,10,13,18, 22, 24	<p>they occurred, must be maintained for 5 years and be made available for inspector review at any time.</p> <p>(c)(2) <u>Visual determination of fugitive emissions records.</u> Maintain a record of the information specified in paragraphs (c)(2)(i) through (iii) of this section for each affected source which performs visual determination of fugitive emissions in accordance with § 63.11517(a), “Monitoring requirements.”</p> <p>(i) The date and results of every visual determination of fugitive emissions;</p> <p>(ii) A description of any corrective action taken subsequent to the test; and (iii) The date and results of any follow-up visual determination of fugitive emissions performed after the corrective actions.</p> <p>(c)(3) <u>Visual determination of emissions opacity records.</u> Maintain a record of the information specified in paragraphs (c)(3)(i) through (iii) of this section for each affected source which performs visual determination of emissions opacity in accordance with § 63.11517(c), “Monitoring requirements.”</p> <p>(i) The date of every visual determination of emissions opacity; and</p> <p>(ii) The average of the six-minute opacities measured by the test; and (iii) A description of any corrective action taken subsequent to the test.</p> <p>(c)(4) Maintain a record of the manufacturer’s specifications for the control devices used to comply with § 63.11516, “What are my standards and management practices?”</p>
19-21	<p>9) According to 40 CFR 63.6655(a) and after May 3, 2013, the Permittee shall keep the records described in items a) through c)</p> <p>a) A copy of each notification and report that the Permittee submitted to comply with this 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).</p> <p>b) Records of the occurrence and duration of each malfunction of operation (<i>i.e.</i>, process equipment) or the air pollution control and monitoring equipment.</p> <p>c) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p> <p>10) According to 40 CFR 63.6655(d) and after May 3, 2013, the Permittee shall keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to the Permittee.</p> <p>11) Pursuant to 40 CFR 63.6655 (e) and after May 3 , 2013, the Permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the Permittee’s maintenance plan.</p> <p>12) Pursuant to 40 CFR 63.6655 (f) and after May 3, 2013, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Permittee shall keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.</p>

Table 5

EU#	Record Keeping Requirements
22	<p>13) In accordance with 40 CFR 63 Subpart 63.11519(c)(11)-(c)15 , the Permittee shall maintain the following records:</p> <p>(c)(11) Visual determination of emissions opacity performed during the preparation (or revision) of the Site-Specific Welding Emissions Management Plan. The Permittee must maintain a record of each visual determination of emissions opacity performed during the preparation (or revision) of a Site-Specific Welding Emissions Management Plan, in accordance with § 63.11516(f)(7)(iii), “Requirements for opacities exceeding 20 percent.”</p> <p>(c)(12) Site-Specific Welding Emissions Management Plan. If the Permittee has been required to prepare a plan in accordance with § 63.11516(f)(7)(iii), “Site-Specific Welding Emissions Management Plan,” the Permittee must maintain a copy of their current Site-Specific Welding Emissions Management Plan in its records and it must be readily available for inspector review.</p> <p>(c)(13) Manufacturer’s instructions. If the Permittee complies with this subpart by operating any equipment according to manufacturer’s instruction, the Permittee must keep these instructions readily available for inspector review.</p> <p>(c)(14) Welding Rod usage. If the Permittee operates a new or existing welding affected source which is not required to comply with the requirements of § 63.11516(f)(3) through (8) because it uses less than 2,000 pounds per year of welding rod (on a rolling 12-month basis), the Permittee must maintain records demonstrating its welding rod usage on a rolling 12- month basis.</p> <p>(c)(15) The Permittee records must be maintained according to the requirements in paragraphs(c)(14)(i) through (iii) of this section.</p> <p>(i) The Permittee’s records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1), “General Provisions.” Where appropriate, the records may be maintained as electronic spreadsheets or as a database.</p> <p>(ii) As specified in § 63.10(b)(1), “General Provisions,” the Permittee must keep each record for 5 years following the date of each occurrence, measurement, corrective action, report, or record.</p> <p>(iii) The Permittee must keep each record onsite for at least 2 years after the date of each occurrence, measurement, corrective action, report, or record according to §63.10(b)(1), “General Provisions”. The Permittee may keep the records offsite for the remaining 3 years.</p> <p>14) In accordance with 40 CFR 63.11519(f)(8), the Permittee shall: within 30 days of an opacity exceedance prepare and implement a Site-specific Welding Emission Management Plan and it must contain:</p> <ol style="list-style-type: none"> Company name A list and description of all welding operations, A description of all management practices and/ or fume control methods currently employed, A list and description of additional management practices and/or fume control methods in place at the time of the opacity exceedance; A description of additional management practices and/or fume control methods to be implemented and the projected date of implementation; and Any revision to the Site Specific Welding Emissions Management Plan must contain copies of all previous plan entries.

Table 5	
EU#	Record Keeping Requirements
Facility Wide	15) In accordance with 310 CMR 7.00: Appendix C (10)(b), the Permittee shall maintain on site the following records for five (5) years from the date of generation and have the records readily available to the Department and EPA personnel: <ul style="list-style-type: none"> a) inspection, maintenance, and testing results of the emission unit and the date upon which it was performed in accordance with 310 CMR 7.04(4)(a); b) records of emissions testing conducted to demonstrate compliance with the applicable requirements in Table 3 in accordance with 310 CMR 7.13(1)(d), c) all monitoring data and supporting information required by this permit on site for five (5) years from the date of the monitoring sample, measurement, report or initial operating permit application, and d) records for the annual preparation of a Source Registration/Emission Statement Form, in accordance with 310 CMR 7.12.
	16) In accordance with 310 CMR 7.12(3), the Permittee shall keep copies of Source registration/ Emission Statement Forms submitted annually to the Department for five (5) years from the date of generation.
	17) In accordance with 40 CFR 60, Appendix A, the Permittee shall maintain records of any EPA Test Method 9 opacity determinations performed according to including detached plumes, required by the Department or EPA for five (5) years from the date of generation.
	18) In accordance with 310 CMR 7.00 Appendix C (9)(b), the Permittee shall record the following information in a logbook on a monthly basis: control and monitoring equipment malfunctions, upsets, repairs, maintenance and any other deviation from equipment design parameters.
	19) In accordance with 40 CFR 64.9, the Permittee shall comply with the recordkeeping requirements specified therein. The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions) for five (5) years from the date of generation.
	20) In accordance with 310 CMR 7.71 (6) b. and c., the Permittee shall retain at the facility for five years and make available to the Department upon request copies of the documentation of the methodology and data used to quantify emissions. (State only requirement)

Table 5 Key:

CMR = Code of Massachusetts regulations
EPA = Environmental Protection Agency
ESP = electrostatic precipitator
EU# = emission unit number

PM = particulate matter (total)
RICE = reciprocating internal combustion engine
TR = transmittal number

Table 6	
EU#	REPORTING REQUIREMENTS
6	1) In accordance with #W003949, the Permittee shall submit a written report to the Department when there is an exceedance of the short or long term NOx emissions identified in Table 3.
3, 4, 5, 6, 13, 17, 18	2) In accordance with 40 CFR 64.9(a), the Permittee shall submit a Monitoring Report that includes at a minimum, the following information, as applicable: a) Summary information on the number, duration and cause of excursions or exceedances, as applicable, and the corrective action taken, (or if the cause is unknown, a statement to that effect of excursions or exceedances, as applicable, and the corrective actions taken; b) Summary information on the number, duration and cause (or if the cause is unknown, a statement to that effect) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); c) statement to that effect) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); d) associated with zero and span or other daily calibration checks, if applicable); e) A description of the actions taken to implement a Quality Improvement Plan (QIP) during the reporting period as specified in 40 CFR 64.8.
5, 7, 10, 13, 18, 22, 24	3) In accordance with 40 CFR 63.11519(b), the Permittee shall prepare and submit annual certification and compliance reports as of January 31 of each year for each affected source according to the requirements of paragraphs (b)(2) through (7) of this section. The annual certification and compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in paragraph (b)(3) of this section.
22	4) In accordance with 40 CFR 63, the Permittee shall prepare and submit a report that contains a visual determination of emissions opacity of the welding affected source. Reports shall include : a) Exceedances of 20 percent opacity for welding affected sources, b) Site-specific Welding Emissions Management Plan reporting: You must submit a copy of the records of daily visual determinations of emissions recorded in accordance with 40 CFR 63.11516(f)(7)(iv),and c) Any subsequent revisions to the Site-Specific Welding Emissions Management Plan pursuant to Sec. 63.11516(f)(8). Note: this emission unit is discharged inside the facility
19-21	5) According to 40 CFR 63.6640(e) and after May 3, 2013, the Permittee shall report each instance in which the Permittee did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to the Permittee. 6) Pursuant to 40 CFR 63.6595(a)(1), the Permittee shall comply with the applicable emission limitations and operating limitations no later than May 3, 2013.
Facility Wide	7) In accordance with 310 CMR 7.12, the Permittee shall submit a Source Registration/Emission Statement Form to MassDEP on an annual basis. 8) At least 30 days prior to emission testing, the Permittee shall submit to MassDEP for approval a stack emission pretest protocol. 9) Within 45 days after emission testing, the Permittee shall submit to MassDEP a final stack emission test results report. 10) In accordance with 310 CMR 7.00: Appendix C(10)(c), the Permittee shall report a summary of all monitoring data and related supporting information to MassDEP at least every six months (January 30 and July 30 of each calendar year). 11) The Permittee shall submit an Annual Compliance report to MassDEP and EPA by January 30 of each year and as required by General Condition 10 of this Operating Permit. 12) Upon the Department's request, any records required by the applicable requirements identified in Section 4 , Applicable Requirements, of the operating permit, or the emissions of any air contaminant from the facility, shall be submitted to the Department within 30 days of the

Table 6	
EU#	REPORTING REQUIREMENTS
Facility Wide	request by the Department, or within a longer time period if approved in writing by the Department. Said response shall be transmitted on paper, on computer disk, or electronically at the discretion of the Department, pursuant to 310 CMR 7.00: Appendix C (10)(a) incorporated herein by reference.
	13) In accordance with 310 CMR 7.00: Appendix C (10)(h), a responsible official of the Permittee must certify all required reports.
	14) In accordance with 310 CMR 7.00: Appendix C (10)(f), the Permittee shall promptly report to the Department all instances of deviations from permit requirements (including but not limited to, emission limitations/standards, inoperable smoke sensing equipment, malfunctioning air pollution control equipment) by telephone or fax, within three days of discovery of such deviation.
	15) In accordance with Tr# X241702, the Permittee shall submit updated versions of the Standard Operating and Maintenance Procedures (SOMP) to the Department. The Department must approve of significant changes to the SOMP prior to the change becoming effective. The updated SOMP shall supersede prior versions of the SOMP.
	16) In accordance with 310 CMR 7.71(5), by April 15 th , 2010 and April 15 th of each year thereafter the Permittee shall report emissions of greenhouse gases from stationary emissions sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions; and owned or leased motor vehicles when stationary source greenhouse gas emissions are greater than 5,000 short tons CO ₂ e. Report greenhouse gas emissions electronically in a format that can be accommodated by the registry. (State only requirement)
	17) In accordance with 310 CMR 7.71(6), the Permittee shall certify greenhouse gas emissions reports using a form provided by the Department or the registry (State only requirement).
	18) In accordance with 310 CMR 7.71(7), by December 31 st of the applicable year the Permittee shall submit to the Department documentation of triennial verification of the greenhouse gas emissions report. (State only requirement)

Table 6 Key:

CAA = Clean Air Act

CFR = Code of Federal Regulations

CI = compression ignition

CMR = Code of Massachusetts regulations

CO₂^e = carbon dioxide equivalents

EPA = Environmental Protection Agency

RICE = Reciprocating Internal Combustion Engine

NOx = nitrogen oxides

SOMP = Standard Operating and Maintenance Procedure

C. GENERAL APPLICABLE REQUIREMENTS

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

Table 7	
Regulation	Reason
310 CMR 7.27	Superseded by 310 CMR 7.28 and 7.32
310 CMR 7.28	As of January 1, 2009, this regulation is no longer applicable; it was superseded by 310 CMR 7.32.
310 CMR 7.16, Reduction of Single Occupant Commuter Vehicle Use	Below Employee Threshold (re-evaluated annually)

Table 7 Key:
CMR = Code of Massachusetts Regulations

5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

Table 8	
EU#	SPECIAL TERMS AND CONDITIONS
5,7,10,13,18,19, 20, 21,22 and 24	1) In accordance with 40 CFR 63.1-15, Subpart A, "General Provisions, the Permittee shall comply with all applicable provisions therein.
5,7,10,13,18,22 and 24	2) In accordance with 40 CFR Part 63 XXXXXX, the Permittee is subject to the National Emission Standards for Hazardous Air Pollutants for Nine Metal Fabrication and Finishing, and shall comply with all applicable requirements
3,4,5,6,13,17 and 18	3) Pursuant to 40 CFR 64.9(a), the Permittee shall submit reports as noted in Tables 4A-4 F, of this Operating Permit.
7,13,18	4) Pursuant to 40 CFR 63.11516(a), the Permittee shall conduct the following management practices for vented enclosures associated with dry abrasive blasting: a) Operate all equipment according to manufacturers' instructions, b) Capture emissions and vent to filtration control devices, c) Take measures to minimize excess dust in surrounding areas to reduce MFHAP emissions as practicable, d) Enclose dusty abrasive material storage areas and holding bins, seal chutes and conveyors that transport abrasive materials.
7,13,18	5) In accordance with 40 CFR 63 subpart XXXXXX, the Permittee shall conduct dry abrasive blasting in an enclosed area if the object is less than 8 feet.
5 and 10	6) Pursuant to 40 CFR 63.11516(c), the Permittee shall conduct the following management practices for dry grinding and dry polishing : a) Operate all equipment associated with dry grinding and polishing operations (including control) according to manufacturers' instructions,

Table 8	
EU#	SPECIAL TERMS AND CONDITIONS
	<ul style="list-style-type: none"> b) Capture emission and vent to filtration control devices, c) Take measures to minimize excess dust in surrounding areas to reduce MFHAP emissions as practicable.
11	7) The Permittee operates several parts cleaners. The units vary from dunk tanks to spray units. In accordance with 310 CMR 7.18(8), the Permittee shall ensure that the parts cleaners conform to the design, operation and maintenance requirements listed therein.
	8) In accordance with 310 CMR 7.18(8), the Permittee shall ensure that all solvents are handled and managed so that evaporation to the atmosphere is minimized.
15	9) In accordance with 310 CMR 7.24(3)(f), the Permittee shall install, maintain and properly operate a Stage I vapor recovery system.
19-21	10) In accordance with the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, 40 CFR 63 subpart ZZZZ, the Permittee shall comply with all applicable requirements and provisions, therein.
	11) After May 3, 2013 and pursuant to 40 CFR 63.6603(a) and the referenced Table 2d, for each emergency stationary CI RICE. The Permittee shall: <ul style="list-style-type: none"> a) Change oil and filter every 500 hours of operation or annually, whichever comes first; b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
	12) According to 40 CFR 63.6605(a) and after May 3, 2013, the Permittee shall be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZ that apply to the Facility at all times.
	13) According to 40 CFR 63.6605(b) and after May 3, 2013, at all times the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MassDEP which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
	14) According to 40 CFR 63.6640(a) and after May 3, 2013, the Permittee shall demonstrate continuous compliance with each emission limitation and operating limitation in Table 2d to this 40 CFR 63 Subpart ZZZZ that apply to the Permittee according to methods specified in Table 6 to 40 CFR 63 Subpart ZZZZ.
	15) According to 40 CFR 63.6665 and after May 3, 2013, the Permittee shall comply with the applicable general provisions listed in Table 8 to 40 CFR 63Subpart ZZZZ except the following: 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
	16) Pursuant to 40 CFR 63.6625(e) and after May 3, 2013, the Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
	17) Pursuant to 40 CFR 63.11516(f)(1), the Permittee shall operate all equipment, capture, and

Table 8	
EU#	SPECIAL TERMS AND CONDITIONS
22	control devices associated with welding operations according to manufacturer's instructions. A copy of the manufacturer's specifications for the capture/control devices must be maintained on site.
22	<p>18) Pursuant to 40 CFR 63.11516 (f)(2), the Permittee shall implement one or more of the following management practices to minimize emissions of MFHAP, as practicable, while maintaining the required welding quality through the application of sound engineering judgment:</p> <ul style="list-style-type: none"> a. Use welding processes with reduced fume generation capabilities (e.g., gas metal arc welding (GMAW) - also called metal inert gas welding (MIG); or b. Use welding process variations (e.g., pulsed current GMAW), which can reduce fume generation rates; or c. Use welding filler metals, shielding gases, carrier gases, or other process materials which are capable of reduced welding fume generation; or d. Optimize welding process variables (e.g., electrode diameter, voltage, amperage, welding angle, shield gas flow rate, travel speed) to reduce the amount of welding fume generated; or e. Use a welding fume capture and control system, operated according to the manufacturer's specifications. <p>NOTE: If the affected welding source uses 2,000 pounds or more per year of welding rod containing one or more MFHAP (calculated on a rolling 12-month basis), the Permittee must demonstrate that management practices or fume control measures are being implemented by complying with the requirements in 63.11516 paragraphs (f)(3) through (f)(8). If less than 2,000 lb/yr is used, paragraphs (a)(i) and (a)(ii) of 40 CFR 63.11516 must still be followed, and the initial notification, notification of compliance status, and the annual compliance certification report is required per Section 63.11519.</p>
24	19) Pursuant to 40 CFR 63.11516(b), the Permittee shall take measures necessary to minimize excess dust in the surrounding area to reduce MFHAP emissions, as practicable; and operate all equipment associated with machining according to manufacturer's instructions.
22 and 24	<p>20) In accordance with 40 CFR 63 XXXXXX, the Permittee shall employ work and management practices to minimize MFHAP fumes/dust.</p> <p>21) In accordance with 40 CFR 63.11516, the Permittee shall operate equipment according to the manufacturer's instructions.</p>
Facility Wide	22) The Permittee is subject to 40 CFR 82: Protection of Stratospheric Ozone. These requirements are enforced by United States Environmental Protection Agency.

Table 8 Key:

CI= Compression Ignition

EU# = Emission Unit number

GMAW =gas metal arc welding

MIG = metal inert gas

CFR = Code of Federal Regulation

Lb/yr = pounds per year

MFHAP = metal fabrication hazardous air pollutant

RICE= Reciprocating internal combustion engine

6. ALTERNATIVE OPERATING SCENARIOS

The Permittee did not request alternative operating scenarios in its Operating Permit application.

7. EMISSIONS TRADING

A. INTRA-FACILITY EMISSION TRADING

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

B. INTER-FACILITY EMISSION TRADING

The Permittee did not request inter-facility emissions trading in its Operating Permit application.

8. COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

GENERAL CONDITIONS FOR OPERATING PERMIT

9. FEES

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating

Permit Reporting Kit” is available to the Permittee via the MassDEP’s web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

A. Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Operating Permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4) any additional information required by the MassDEP to determine the compliance status of the source.

B. Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- 4) whether there were any deviations during the reporting period;
- 5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;

- 6) whether deviations in the reporting period were previously reported;
- 7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- 8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- 9) any additional information required by the MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

12. PERMIT SHIELD

- A. This facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier approval or Permit, the terms and conditions of this Permit control.

- B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Table 7.

- C. Nothing in this Permit shall alter or affect the following:

- 1) the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
- 2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401,

§408(a); or

- 3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

14. PERMIT TERM

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon the MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. REOPENING FOR CAUSE

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

18. DUTY TO SUPPLEMENT

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

20. PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- A. enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
- B. have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- C. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

22. PERMIT AVAILABILITY

The Permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

23. SEVERABILITY CLAUSE

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

24. EMERGENCY CONDITIONS

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based¹ emission limitations specified in this Permit as a result of an emergency². In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. an emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. the permitted facility was at the time being properly operated;
- C. during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this Permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6. of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone, fax or electronic mail (e-mail), within three (3) days of discovery of such deviation:

¹ Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

² An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

- A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- B. Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the Permit or approval as surrogate for an emission limit.
- C. Exceedances of Permit operational limitations directly correlated to excess emissions.
- D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- E. Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>. This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The Permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

- A. Administrative Amendments - The Permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- B. Minor Modifications - The Permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).
- C. Significant Modifications - The Permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

28. OZONE DEPLETING SUBSTANCES

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

- A. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - 1) All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
 - 2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
 - 3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.

- 4) No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
- B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
- 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.
 - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
 - 3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - 4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
 - 5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.
 - 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- C. If the Permittee manufactures, transforms, imports or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
- D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.
- E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

29. PREVENTION OF ACCIDENTAL RELEASES

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

APPEAL CONDITIONS FOR OPERATING PERMIT

This Permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.